

Index to Volume 158

Alphabetical Table of Contents of Authors

- Abrams, Peter A. The Effect of Density-Independent Mortality on the Coexistence of Exploitative Competitors for Renewing Resources, 459
- Acuña, José Luis. Pelagic Tunicates: Why Gelatinous? 100
- Agrawal, Aneil F., Edmund D. Brodie III, and Michael J. Wade. On Indirect Genetic Effects in Structured Populations, 308
- Ahrens, Mitchell A. See Etges, William J., 585
- Allen, Emily G. See Shurin, Jonathan B., 624
- Amarasekare, Priyanga, and Roger M. Nisbet. Spatial Heterogeneity, Source-Sink Dynamics, and the Local Coexistence of Competing Species, 572
- Andersson, Malte. Relatedness and the Evolution of Conspecific Brood Parasitism, 599
- Avellar, Teresa. See Matos, Margarida, 655
- Badyaev, Alexander V., Geoffrey E. Hill, Peter O. Dunn, and John C. Glen. Plumage Color as a Composite Trait: Developmental and Functional Integration of Sexual Ornamentation, 221
- Basolo, Alexandra. See Endler, John A., 36
- Ben-Moshe, Ariela, Tamar Dayan, and Daniel Simberloff. Convergence in Morphological Patterns and Community Organization between Old and New World Rodent Guilds, 484
- Berrigan, David. See Huey, Raymond B., 204
- Bond, William J. See Keeley, Jon E., 664
- Borgia, Gerald. See Uy, J. Albert C., 530
- Boulinier, T. See Selmi, S., 426
- Brodie, Edmund D., III. See Agrawal, Aneil F., 308
- Brown, C. R. See Møller, A. P., 136
- Cantrell, Robert Stephen, Chris Cosner, and William F. Fagan. How Predator Incursions Affect Critical Patch Size: The Role of the Functional Response, 368
- Carvajal, Ricardo. See Vandermeer, John, 211
- Chien, Susan A. See Tatar, Marc, 248
- Conner, Jeffrey K. See Strauss, Sharon Y., 496
- Cosner, Chris. See Cantrell, Robert Stephen, 368
- Daehler, Curtis C. Darwin's Naturalization Hypothesis Revisited, 324
- Dale, James, David B. Lank, and Hudson Kern Reeve. Signaling Individual Identity versus Quality: A Model and Case Studies with Ruffs, Queleas, and House Finches, 75
- Daley, Michael J. See Fraser, Douglas F., 124
- Dayan, Tamar. See Kronfeld-Schor, Noga, 451
- . See Ben-Moshe, Ariela, 484
- DeHeer, Christopher J. See Herbers, Joan M., 178
- Delibes, Miguel, Pilar Gaona, and Pablo Ferreras. Effects of an Attractive Sink Leading into Maladaptive Habitat Selection, 277
- de Mazancourt, Claire, Michel Loreau, and Ulf Dieckmann. Can the Evolution of Plant Defense Lead to Plant-Herbivore Mutualism? 109
- de Roos, André M. See Mylius, Sido D., 259
- Dieckmann, Ulf. See de Mazancourt, Claire, 109
- Dobson, F. Stephen, and Madan K. Oli. The Demographic Basis of Population Regulation in Columbian Ground Squirrels, 236
- Dunn, Peter O. See Badyaev, Alexander V., 221
- Elvert, Ralf. See Kronfeld-Schor, Noga, 451
- Endler, John A., Alexandra Basolo, Stan Glowacki, and Julianne Zerr. Variation in Response to Artificial Selection for Light Sensitivity in Guppies (*Poecilia reticulata*), 36
- Etges, William J., and Mitchell A. Ahrens. Premating Isolation Is Determined by Larval-Rearing Substrates in Cactophilic *Drosophila mojavensis*. V. Deep Geographic Variation in Epicuticular Hydrocarbons among Isolated Populations, 585
- Etienne, Rampal S., and J. A. P. Heesterbeek. Rules of Thumb for Conservation of Metapopulations Based on a Stochastic Winking-Patch Model, 389
- Fagan, William F. See Cantrell, Robert Stephen, 368
- Fairbairn, J. P. See Fenton, A., 408
- Fenton, A., R. Norman, J. P. Fairbairn, and P. J. Hudson. Evaluating the Efficacy of Entomopathogenic Nematodes for the Biological Control of Crop Pests: A Nonequilibrium Approach, 408
- Ferreras, Pablo. See Delibes, Miguel, 277
- Flores Martinez, Tania Y. See Rosenthal, Gil G., 146
- Foitzik, Susanne. See Herbers, Joan M., 178
- Foster, Kevin R., and Francis L. W. Ratnieks. The Effect of Sex-Allocation Biasing on the Evolution of Worker Policing in Hymenopteran Societies, 615
- Fraser, Douglas F., James F. Gilliam, Michael J. Daley, An N. Le, and Garrick T. Skalski. Explaining Leptokurtic Movement Distributions: Intrapopulation Variation in Boldness and Exploration, 124
- Gaona, Pilar. See Delibes, Miguel, 277
- García de León, Francisco J. See Rosenthal, Gil G., 146
- Gilliam, James F. See Fraser, Douglas F., 124
- Glen, John C. See Badyaev, Alexander V., 221
- Glowacki, Stan. See Endler, John A., 36
- Haarstad, John. See Haddad, Nick M., 17
- Haddad, Nick M., David Tilman, John Haarstad, Mark Ritchie, and Johannes M. H. Knops. Contrasting Effects of Plant Richness and Composition on Insect Communities: A Field Experiment, 17
- Haim, Abraham. See Kronfeld-Schor, Noga, 451
- Hansen, Bo T. See Slagsvold, Tore, 354
- Hanski, Ilkka, and Michael C. Singer. Extinction-Colonization Dynamics and Host-Plant Choice in Butterfly Metapopulations, 341
- Heesterbeek, J. A. P. See Etienne, Rampal S., 389
- Heldmaier, Gerhard. See Kronfeld-Schor, Noga, 451
- Herbers, Joan M., Christopher J. DeHeer, and Susanne Foitzik. Conflict over Sex Allocation Drives Conflict over Reproductive Allocation in Perennial Social Insect Colonies, 178

- Hill, Geoffrey E. See Badyaev, Alexander V., 221
- Howard, R. D. See Muir, W. M., 1
- Howe, Henry F. See Saha, Sonali, 659
- Hudson, P. J. See Fenton, A., 408
- Huey, Raymond B., and David Berrigan. Temperature, Demography, and Ectotherm Fitness, 204
- Jasentuliyana, A. See Weiner, J., 438
- Joern, Anthony. See Winemiller, Kirk O., 193
- Kasuya, Eiti. See Tsuji, Kazuki, 155
- Keeley, Jon E., and William J. Bond. On Incorporating Fire into Our Thinking about Natural Ecosystems: A Response to Saha and Howe, 664
- Keller, Laurent. See Reuter, Max, 166
- Keller, Michael A. See Tenhumberg, Brigitte, 505
- Klumpers, Katja. See Mylius, Sido D., 259
- Knops, Johannes M. H. See Haddad, Nick M., 17
- Kronfeld-Schor, Noga, Tamar Dayan, Ralf Elvert, Abraham Haim, Nava Zisapel, and Gerhard Heldmaier. On the Use of the Time Axis for Ecological Separation: Diel Rhythms as an Evolutionary Constraint, 451
- Kruuk, Loeske E. B., Juha Merilä, and Ben C. Sheldon. Phenotypic Selection on a Heritable Size Trait Revisited, 557
- Lank, David B. See Dale, James, 75
- Le, An N. See Fraser, Douglas F., 124
- Lehmann, Laurent. See Perrin, Nicolas, 471
- Lehtilä, Kari P. See Strauss, Sharon Y., 496
- Lindström, Kai. Effects of Resource Distribution on Sexual Selection and the Cost of Reproduction in Sandgobies, 64
- Loreau, Michel. See de Mazancourt, Claire, 109
- Lozano, George A. Carotenoids, Immunity, and Sexual Selection: Comparing Apples and Oranges? 200
- Matos, Margarida, and Teresa Avelar. Adaptation to the Laboratory: Comments on Sgrò and Partridge, 655
- McElreath, Richard. See Soltis, Joseph, 519
- Merilä, Juha. See Kruuk, Loeske E. B., 557
- Merino, S. See Møller, A. P., 136
- Michod, Richard E. See Roze, Denis, 638
- Møller, A. P., S. Merino, C. R. Brown, and R. J. Robertson. Immune Defense and Host Sociality: A Comparative Study of Swallows and Martins, 136
- Muir, W. M., and R. D. Howard. Fitness Components and Ecological Risk of Transgenic Release: A Model Using Japanese Medaka (*Oryzias latipes*), 1
- Muller-Landau, H. See Weiner, J., 438
- Mylius, Sido D., Katja Klumpers, André M. de Roos, and Lennart Persson. Impact of Intraguild Predation and Stage Structure on Simple Communities along a Productivity Gradient, 259
- Nisbet, Roger M. See Amarasekare, Priyanga, 572
- Norman, R. See Fenton, A., 408
- Oli, Madan K. See Dobson, F. Stephen, 236
- Partridge, Linda. See Sgrò, Carla M., 657
- Patricelli, Gail L. See Uy, J. Albert C., 530
- Perrin, Nicolas, and Laurent Lehmann. Is Sociality Driven by the Costs of Dispersal or the Benefits of Philopatry? A Role for Kin-Discrimination Mechanisms, 471
- Persson, Lennart. See Mylius, Sido D., 259
- Pianka, Eric R. See Winemiller, Kirk O., 193
- Possingham, Hugh P. See Tenhumberg, Brigitte, 505
- Priest, Nicholas Kiefer. See Tatar, Marc, 248
- Pruett-Jones, Stephen. See Swaddle, John P., 300
- Ratnieks, Francis L. W. See Foster, Kevin R., 615
- Rausher, Mark D. See Stinchcombe, John R., 376
- Reeve, Hudson Kern. See Dale, James, 75
- Reuter, Max, and Laurent Keller. Sex Ratio Conflict and Worker Production in Eusocial Hymenoptera, 166
- Ricketts, Taylor H. The Matrix Matters: Effective Isolation in Fragmented Landscapes, 87
- Ritchie, Mark. See Haddad, Nick M., 17
- Robertson, R. J. See Møller, A. P., 136
- Rogers, Lock, and Robert Craig Sargent. A Dynamic Model of Size-Dependent Reproductive Effort in a Sequential Hermaphrodite: A Counterexample to Williams's Conjecture, 543
- Rohde, Klaus, and Peter P. Rohde. Fuzzy Chaos: Reduced Chaos in the Combined Dynamics of Several Independently Chaotic Populations, 553
- Rohde, Peter P. See Rohde, Klaus, 553
- Rosenthal, Gil G., Tania Y. Flores Martinez, Francisco J. García de León, and Michael J. Ryan. Shared Preferences by Predators and Females for Male Ornaments in Swordtails, 146
- Roze, Denis, and Richard E. Michod. Mutation, Multilevel Selection, and the Evolution of Propagule Size during the Origin of Multicellularity, 638
- Ryan, Michael J. See Rosenthal, Gil G., 146
- Saha, Sonali, and Henry F. Howe. The Bamboo Fire Cycle Hypothesis: A Comment, 659
- Sargent, Robert Craig. See Rogers, Lock, 543
- Selmi, S., and T. Boulinier. Ecological Biogeography of Southern Ocean Islands: The Importance of Considering Spatial Issues, 426
- Sgrò, Carla M., and Linda Partridge. Laboratory Adaptation of Life History in *Drosophila*, 657
- Sheldon, Ben C. See Kruuk, Loeske E. B., 557
- Shurin, Jonathan B., and Emily G. Allen. Effects of Competition, Predation, and Dispersal on Species Richness at Local and Regional Scales, 624
- Simberloff, Daniel. See Ben-Moshe, Ariela, 484
- Singer, Michael C. See Hanski, Ilkka, 341
- Skalski, Garrick T. See Fraser, Douglas F., 124
- Slagsvold, Tore, and Bo T. Hansen. Sexual Imprinting and the Origin of Obligate Brood Parasitism in Birds, 354
- Soltis, Joseph, and Richard McElreath. Can Females Gain Extra Paternal Investment by Mating with Multiple Males? A Game Theoretic Approach, 519
- Stinchcombe, John R., and Mark D. Rausher. Diffuse Selection on Resistance to Deer Herbivory in the Ivyleaf Morning Glory, *Ipomoea hederacea*, 376
- Stirling, Gray, and Brian Wilsey. Empirical Relationships between Species Richness, Evenness, and Proportional Diversity, 286
- Stoll, P. See Weiner, J., 438
- Strauss, Sharon Y., Jeffrey K. Conner, and Kari P. Lehtilä. Effects of Foliar Herbivory by Insects on the Fitness of *Raphanus raphanistrum*: Damage Can Increase Male Fitness, 496
- Swaddle, John P., and Stephen Pruett-Jones. Starlings Can Categorize Symmetry Differences in Dot Displays, 300
- Tatar, Marc, Susan A. Chien, and Nicholas Kiefer Priest. Negligible Senescence during Reproductive Dormancy in *Drosophila melanogaster*, 248
- Tenhumberg, Brigitte, Michael A. Keller, Andrew J. Tyre, and Hugh P. Possingham. The Effect of Resource Aggregation at Different Scales: Optimal Foraging Behavior of *Cotesia rubecula*, 505

- Tilman, David. See Haddad, Nick M., 17
- Tsuji, Kazuki, and Eiiti Kasuya. What Do the Indices of Reproductive Skew Measure? 155
- Tufto, Jarle. Effects of Releasing Maladapted Individuals: A Demographic-Evolutionary Model, 331
- Tyre, Andrew J. See Tenhumberg, Brigitte, 505
- Uy, J. Albert C., Gail L. Patricelli, and Gerald Borgia. Complex Mate Searching in the Satin Bowerbird *Ptilonorhynchus violaceus*, 530
- Vandermeer, John, and Ricardo Carvajal. Metapopulation Dynamics and the Quality of the Matrix, 211
- Vitt, Laurie J. See Winemiller, Kirk O., 193
- Wade, Michael J. See Agrawal, Anil F., 308
- Weiner, J., P. Stoll, H. Muller-Landau, and A. Jasentuliyana. The Effects of Density, Spatial Pattern, and Competitive Symmetry on Size Variation in Simulated Plant Populations, 438
- Wilsey, Brian. See Stirling, Gray, 286
- Wilson, Howard B. See Yu, Douglas W., 49
- Winemiller, Kirk O., Eric R. Pianka, Laurie J. Vitt, and Anthony Joern. Food Web Laws or Niche Theory? Six Independent Empirical Tests, 193
- Yu, Douglas W., and Howard B. Wilson. The Competition-Colonization Trade-off Is Dead; Long Live the Competition-Colonization Trade-off, 49
- Zerr, Julianne. See Endler, John A., 36
- Zisapel, Nava. See Kronfeld-Schor, Noga, 451

Alphabetical Table of Contents of Titles

- Adaptation to the Laboratory: Comments on Sgrò and Partridge. Margarida Matos and Teresa Avelar, 655.
- The Bamboo Fire Cycle Hypothesis: A Comment. Sonali Saha and Henry F. Howe, 659.
- Can Females Gain Extra Paternal Investment by Mating with Multiple Males? A Game Theoretic Approach. Joseph Soltis and Richard McElreath, 519.
- Can the Evolution of Plant Defense Lead to Plant-Herbivore Mutualism? Claire de Mazancourt, Michel Loreau, and Ulf Dieckmann, 109.
- Carotenoids, Immunity, and Sexual Selection: Comparing Apples and Oranges? George A. Lozano, 200.
- The Competition-Colonization Trade-off Is Dead; Long Live the Competition-Colonization Trade-off. Douglas W. Yu and Howard B. Wilson, 49.
- Complex Mate Searching in the Satin Bowerbird *Ptilonorhynchus violaceus*. J. Albert C. Uy, Gail L. Patricelli, and Gerald Borgia, 530.
- Conflict over Sex Allocation Drives Conflict over Reproductive Allocation in Perennial Social Insect Colonies. Joan M. Herbers, Christopher J. DeHeer, and Susanne Foitzik, 178.
- Contrasting Effects of Plant Richness and Composition on Insect Communities: A Field Experiment. Nick M. Haddad, David Tilman, John Haarstad, Mark Ritchie, and Johannes M. H. Knops, 17.
- Convergence in Morphological Patterns and Community Organization between Old and New World Rodent Guilds. Ariela Ben-Moshe, Tamar Dayan, and Daniel Simberloff, 484.
- Darwin's Naturalization Hypothesis Revisited. Curtis C. Daehler, 324.
- The Demographic Basis of Population Regulation in Columbian Ground Squirrels. F. Stephen Dobson and Madan K. Oli, 236.
- Diffuse Selection on Resistance to Deer Herbivory in the Ivyleaf Morning Glory, *Ipomoea hederacea*. John R. Stinchcombe and Mark D. Rausher, 376.
- A Dynamic Model of Size-Dependent Reproductive Effort in a Sequential Hermaphrodite: A Counterexample to Williams's Conjecture. Lock Rogers and Robert Craig Sargent, 543.
- Ecological Biogeography of Southern Ocean Islands: The Importance of Considering Spatial Issues. S. Selmi and T. Boulinier, 426.
- The Effect of Density-Independent Mortality on the Coexistence of Exploitative Competitors for Renewing Resources. Peter A. Abrams, 459.
- The Effect of Resource Aggregation at Different Scales: Optimal Foraging Behavior of *Cotesia rubecula*. Brigitte Tenhumberg, Michael A. Keller, Andrew J. Tyre, and Hugh P. Possingham, 505.
- The Effect of Sex-Allocation Biasing on the Evolution of Worker Policing in Hymenopteran Societies. Kevin R. Foster and Francis L. W. Ratnieks, 615.
- Effects of an Attractive Sink Leading into Maladaptive Habitat Selection. Miguel Delibes, Pilar Gaona, and Pablo Ferreras, 277.
- Effects of Competition, Predation, and Dispersal on Species Richness at Local and Regional Scales. Jonathan B. Shurin and Emily G. Allen, 624.
- The Effects of Density, Spatial Pattern, and Competitive Symmetry on Size Variation in Simulated Plant Populations. J. Weiner, P. Stoll, H. Muller-Landau, and A. Jasentuliyana, 438.
- Effects of Foliar Herbivory by Insects on the Fitness of *Raphanus raphanistrum*: Damage Can Increase Male Fitness. Sharon Y. Strauss, Jeffrey K. Conner, and Kari P. Lehtilä, 496.
- Effects of Releasing Maladapted Individuals: A Demographic-Evolutionary Model. Jarle Tufto, 331.
- Effects of Resource Distribution on Sexual Selection and the Cost of Reproduction in Sandgobies. Kai Lindström, 64.
- Empirical Relationships between Species Richness, Evenness, and Proportional Diversity. Gray Stirling and Brian Wilsey, 286.
- Evaluating the Efficacy of Entomopathogenic Nematodes for the Biological Control of Crop Pests: A Nonequilibrium Approach. A. Fenton, R. Norman, J. P. Fairbairn, and P. J. Hudson, 408.
- Explaining Leptokurtic Movement Distributions: Intrapopulation Variation in Boldness and Exploration. Douglas F. Fraser, James F. Gilliam, Michael J. Daley, An N. Le, and Garrick T. Skalski, 124.
- Extinction-Colonization Dynamics and Host-Plant Choice in Butterfly Metapopulations. Ilkka Hanski and Michael C. Singer, 341.
- Fitness Components and Ecological Risk of Transgenic Release: A Model Using

- Japanese Medaka (*Oryzias latipes*). W. M. Muir and R. D. Howard, 1.
- Food Web Laws or Niche Theory? Six Independent Empirical Tests. Kirk O. Winemiller, Eric R. Pianka, Laurie J. Vitt, and Anthony Joern, 193.
- Fuzzy Chaos: Reduced Chaos in the Combined Dynamics of Several Independently Chaotic Populations. Klaus Rohde and Peter P. Rohde, 553.
- How Predator Incursions Affect Critical Patch Size: The Role of the Functional Response. Robert Stephen Cantrell, Chris Cosner, and William F. Fagan, 368.
- Immune Defense and Host Sociality: A Comparative Study of Swallows and Martins. A. P. Møller, S. Merino, C. R. Brown, and R. J. Robertson, 136.
- Impact of Intraguild Predation and Stage Structure on Simple Communities along a Productivity Gradient. Sido D. Mylius, Katja Klumpers, André M. de Roos, and Lennart Persson, 259.
- Is Sociality Driven by the Costs of Dispersal or the Benefits of Philopatry? A Role for Kin-Discrimination Mechanisms. Nicolas Perrin and Laurent Lehmann, 471.
- Laboratory Adaptation of Life History in *Drosophila*. Carla M. Sgrò and Linda Partridge, 657.
- The Matrix Matters: Effective Isolation in Fragmented Landscapes. Taylor H. Ricketts, 87.
- Metapopulation Dynamics and the Quality of the Matrix. John Vandermeer and Ricardo Carvajal, 211.
- Mutation, Multilevel Selection, and the Evolution of Propagule Size during the Origin of Multicellularity. Denis Roze and Richard E. Michod, 638.
- Negligible Senescence during Reproductive Dormancy in *Drosophila melanogaster*. Marc Tatar, Susan A. Chien, and Nicholas Kiefer Priest, 248.
- On Incorporating Fire into Our Thinking about Natural Ecosystems: A Response to Saha and Howe. Jon E. Keeley and William J. Bond, 664.
- On Indirect Genetic Effects in Structured Populations. Anel F. Agrawal, Edmund D. Brodie III, and Michael J. Wade, 308.
- On the Use of the Time Axis for Ecological Separation: Diel Rhythms as an Evolutionary Constraint. Noga Kronfeld-Schor, Tamar Dayan, Ralf Elvert, Abraham Haim, Nava Zisapel, and Gerhard Heldmaier, 451.
- Pelagic Tunicates: Why Gelatinous? José Luis Acuña, 100.
- Phenotypic Selection on a Heritable Size Trait Revisited. Loeske E. B. Kruuk, Juha Merilä, and Ben C. Sheldon, 557.
- Plumage Color as a Composite Trait: Developmental and Functional Integration of Sexual Ornamentation. Alexander V. Badyaev, Geoffrey E. Hill, Peter O. Dunn, and John C. Glen, 221.
- Premating Isolation Is Determined by Larval-Rearing Substrates in Cactophilic *Drosophila mojavensis*. V. Deep Geographic Variation in Epicuticular Hydrocarbons among Isolated Populations. William J. Etges and Mitchell A. Ahrens, 585.
- Relatedness and the Evolution of Conspecific Brood Parasitism. Malte Andersson, 599.
- Rules of Thumb for Conservation of Metapopulations Based on a Stochastic Winking-Patch Model. Rampal S. Etienne and J. A. P. Heesterbeek, 389.
- Sex Ratio Conflict and Worker Production in Eusocial Hymenoptera. Max Reuter and Laurent Keller, 166.
- Sexual Imprinting and the Origin of Obligate Brood Parasitism in Birds. Tore Slagsvold and Bo T. Hansen, 354.
- Shared Preferences by Predators and Females for Male Ornaments in Swordtails. Gil G. Rosenthal, Tania Y. Flores Martinez, Francisco J. Garcia de León, and Michael J. Ryan, 146.
- Signaling Individual Identity versus Quality: A Model and Case Studies with Ruffs, Queleas, and House Finches. James Dale, David B. Lank, and Hudson Kern Reeve, 75.
- Spatial Heterogeneity, Source-Sink Dynamics, and the Local Coexistence of Competing Species. Priyanga Amarasekare and Roger M. Nisbet, 572.
- Starlings Can Categorize Symmetry Differences in Dot Displays. John P. Swaddle and Stephen Pruett-Jones, 300.
- Temperature, Demography, and Ectotherm Fitness. Raymond B. Huey and David Berrigan, 204.
- Variation in Response to Artificial Selection for Light Sensitivity in Guppies (*Poecilia reticulata*). John A. Endler, Alexandra Basolo, Stan Glowacki, and Julianne Zerr, 36.
- What Do the Indices of Reproductive Skew Measure? Kazuki Tsuji and Eiiti Kasuya, 155.

Alphabetical Table of Keywords

- abundance, 17
- Acomys*, 451
- activity rhythm, 451
- adaptive dynamics, 109
- additive genetic variance, 557
- alternative stable states, 49
- altruism, 471, 638
- artificial selection, 36
- assemblage, 193
- associative learning, 471
- asymmetric competition, 438
- attractive sink, 277
- bamboo, 659, 664
- biodiversity, 286
- biological control, 408
- BLUP breeding values, 557
- body size, 100
- body temperature rhythm, 451
- boldness, 124
- brood parasitism, 354
- butterflies, 87
- cactus, 585
- carotenoid, 200
- Carpodacus mexicanus*, 221
- chaos, 553
- classical metapopulation, 341
- coevolution, 136
- coexistence, 459, 572, 624
- coloniality, 136
- colonization, 341, 389
- colony growth, 166
- community structure, 484

- community-wide character displacement, 484
- competition, 259, 459, 572
- composite trait, 221
- composition, 17
- conflict, 166
- connectance, 193
- conservation, 211, 277, 389
- convergent evolution, 655
- cooperative breeding, 599
- correlates of fitness, 204
- Cotesia rubecula*, 505
- critique, 659, 664
- cuckoos, 354
- cuticular hydrocarbons, 585
- decision-tree model, 599
- delayed reproduction, 659, 664
- demographic mechanisms, 236
- diapause, 248
- diffuse coevolution, 376
- dispersal, 87, 124, 426, 624
- dispersal-competition trade-off, 572
- diversity, 17, 286, 459
- dormancy, 248
- Drosophila*, 585, 655, 657
- dynamic programming, 543
- ecomorphology, 484
- ectotherm, 204
- edge effects, 368
- elasticity analysis, 236
- endosymbiosis, 638
- entomopathogenic nematodes, 408
- evenness, 286
- evolution, 109
- evolutionary constraint, 451
- evolutionary rate, 308
- evolutionary transitions, 638
- exploration, 124
- extinction, 211, 277, 389
- female multiple mating, 519
- female philopatry, 599
- Ficedula albicollis*, 557
- filtration, 100
- fish, 1
- fitness, 204
- fitness components, 1
- flora, 324
- fluctuating asymmetry, 300
- fluid mechanics, 100
- food webs, 259
- fragmentation, 87
- fuels, 659, 664
- functional groups, 17
- fuzzy chaos, 553
- game theory, 471
- gelatinous zooplankton, 100
- genera, 324
- generalist predators, 368
- genetic sampling effect, 655
- genetic variation, 36, 331
- genetically modified organisms, 1
- geographic scale, 426
- grazing optimization, 109
- group selection, 308
- group size, 155
- guild convergence, 484
- habitat destruction, 49
- habitat fragmentation, 368
- harshness, 459
- Hawaiian Islands, 324
- herbivory, 376, 496
- Hirundinidae, 136
- host-parasite relatedness, 599
- Hymenoptera, 166
- identity signals, 75
- immigration, 572
- immune system, 200
- immunity, 200
- incidental predation, 368
- inclusive fitness, 599
- index of reproductive skew, 155
- India, 659, 664
- indirect genetic effects, 308
- individual-based models, 438
- individual recognition, 75
- insect pathogen, 408
- insects, 17
- intermediate disturbance hypothesis, 459
- intrinsic rate of increase, 204
- introduced species, 324
- invasion, 324
- Ipomoea hederacea*, 376
- island biogeography, 426
- juvenile hormone, 248
- keystone predators, 624
- kin competition, 471
- kin discrimination, 599
- kin selection, 166
- laboratory adaptation, 655, 657
- landscape ecology, 87, 211
- leptokurtic, 124
- levels of selection, 638
- life histories, 178
- life history, 1, 64, 543, 657
- life-history omnivory, 259
- life-table response experiment (LTRE) analysis, 236
- local and regional processes, 624
- local richness, 426
- longevity, 64
- male plant fitness, 496
- management, 277
- masking, 451
- mass flowering, 664
- mast flowering, 659
- mate choice, 530
- mate sampling, 530
- mate searching, 530
- mating benefits, 519
- mating strategy, 519
- mating systems, 64
- matrix, 87
- matrix quality, 211
- maximum likelihood, 87
- mean reproductive output, 155
- Melitaea cinxia*, 341
- metapopulation, 49, 211, 389, 624
- metapopulation dynamics, 368
- metapopulations, 553
- migration, 331
- model, 166, 259
- models of intermediate complexity, 408
- monocarpic, 659, 664
- morphological integration, 221
- mortality, 459
- movement, 124
- multicellularity, 638
- mutation load, 638
- mutual policing, 615
- mutualism, 109
- natural selection, 557
- net reproductive rate, 204
- niche, 193
- nonequilibrium analysis, 408
- nonlinear dynamics, 553
- nonprocreative mating, 519
- nutrient cycling, 109
- operant learning, 300
- optimal foraging behavior, 505
- oviposition preference, 341
- parasitism, 136
- partial life cycle model, 236
- Parus caeruleus*, 354
- Parus major*, 354
- paternal investment, 519
- path analysis, 286
- pelagic tunicate, 100
- perception, 300
- phenotypic selection, 221
- Pieris rapae*, 496
- plant-herbivore interaction, 109
- plants, 324
- plumage color, 75, 221
- Poeciliidae, 146
- polyandry, 519
- population ecology, 553
- population regulation, 236, 331
- population structure, 438
- population subdivision, 308
- predation, 146, 459

- predator-prey interaction, 193
 productivity, 459
Ptilonorhynchus violaceus, 530

 quality indicators, 75
 queen-worker conflict, 178

Raphanus raphanistrum, 496
 regional richness, 426
 relatedness, 471
 reproduction, 248
 reproductive allocation, 178
 reproductive conflict, 615
 reproductive effort, 543
 reproductive value, 543
 resistance, 376
 resource aggregation, 505
 resource distribution, 64
 richness, 286
 risk assessment, 1
Rivulus, 124

 sampling error, 155
 satin bowerbird, 530
 seed-size selection, 484
 seedling recruitment, 659, 664
 selection, 36
 senescence, 248

 sensory drive, 36
 sex-allocation conflict, 615
 sex change, 543
 sex ratios, 178
 sexual imprinting, 354
 sexual isolation, 585
 sexual ornaments, 221
 sexual selection, 64, 75, 146, 200
 signal properties, 75
 signals, 300
 size inequality, 438
 size refugia, 259
 social insects, 615
 Sonoran Desert, 585
 source-sink dynamics, 572
 source-sink metapopulation, 277
 spatial autocorrelation, 426
 spatial dynamics, 341
 spatial effects, 438
 spatial heterogeneity, 572
 spatial scale, 505
 spatial subsidies, 368
 spatially based discrimination, 471
 speciation, 585
 species density, 286
 species packing, 193
 species richness, 17
Spermophilus columbianus, 236

 stabilizing selection, 331
 stochastic dynamic programming, 505
 stress resistance, 248
 structured populations, 259
Sturnus vulgaris, 300
 swallows, 136
 symmetry, 300

 tarsus length, 557
 temperature, 204
 temporal partitioning, 451
Thalassoma bifasciatum, 543
 thermal sensitivity, 204
 tolerance, 496
 transgenics, 1
 transient dynamics, 408

 virulence, 136
 vision, 36
 visual signals, 146

 water content, 100
 wildfire, 659, 664
 worker policing, 615

Xiphophorus, 146

 zone of influence, 438

